

REMARKS/ARGUMENTS

Claims 1-35 are in the application. Please amend claims 26 and 27 as shown. Claims 28-32 and 35 are drawn to non-elected claims and are therefore shown on the attached Listing as "withdrawn" status. Therefore, claims 1-27 and 33-34 are presented for Examiner Fletcher's consideration.

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendments and following remarks is respectfully requested.

Applicants thank Examiner Fletcher for including in the Office Action mailed May 18 8, 2006 signed copies of the initialed Forms PTO-1449 sent with Applicants' Information Disclosure Statements (IDS) received by the Office on 3/1/2004, 11/4/2004, 1/18/2005, 1/21/2005 and 3/25/2005.

In the Specification

By way of sections 6 and 7 of the Office Action mailed May 18, 2006, Applicants were advised to check the specification for errors. In particular, the Examiner noted the use of many trademarks and counseled their proper use. Applicants' agent reviewed the specification and submits herewith replacement paragraphs as shown above on pages 2-6, in the requested amendments to the specification.

By way of section 8 of the Office Action mailed May 18, 2006, the specification was objected to for possibly failing to provide antecedent basis for the portion of method claim 33 that recites "an aqueous topical treatment solution that does not include an organic phosphate ester", and Applicants were requested to provide page and line number in the specification where antecedent basis might be found. Please note on page 4 of the specification, the paragraph beginning at line 8 and continuing onto page 5 line 2. In particular, the method recited thereat states on page 4 lines 12-13 that the method includes, "...providing a nonwoven substrate; contacting the nonwoven substrate with an aqueous topical treatment solution that does not include an organic phosphate ester, wherein the...". Applicants submit that this provides antecedent basis for the language in claim 33.

Claims objection

By way of section 9 of the Office Action mailed May 18, 2006, claim 26 was objected to for informality. Specifically, claim 26 was missing the word "the". Applicants thank the Examiner for noting this error and have corrected claim 26 as shown on the attached Listing of the claims. Claim 27 as originally filed contained the same error which the Applicants correct herewith also.

Claims rejections, 35 U.S.C. §112

By way of sections 10-11 of the Office Action mailed May 18, 2006, claims 1-27, 33 and 34 were rejected under 35 U.S.C. §112 as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter. The 35 U.S.C. §112 rejections were presented in 3 sub-paragraphs A, B and C. These rejections are respectfully **traversed** as described below.

Regarding sub-paragraph A, claims 1, 2, 11-18 and 33 recite, "wherein the treatment solution comprises" various weight percentages of components such as antistatic agent, ionic fluoropolymer, monovalent salt. Claims 19-21 recite the additional method step of, "drying the treated substrate" and then recite that, "the dried substrate" has various weight percentages of fluorine. In the Office Action, it was stated that these claims were unclear because it was not clear to what these weight percentages refer – i.e., not clear whether they referred to the solids content, the total solution weight, or the dry weight of the film. Applicants submit that it is clear to one skilled in the art that for claims 1, 2, 11-18 and 33 reciting (e.g.) wherein a treatment solution comprises 0.5 weight percent of an ionic fluoropolymer, this is not describing the dry weight of the substrate but rather the treatment solution itself. That is, to be clear, the total weight of the treatment solution for the example statement given above must include 0.5 percent by weight of the fluoropolymer – 0.5 grams fluoropolymer for each 100 grams total of treatment solution. Similarly, Applicants submit that it is clear to one skilled in the art that for claims 19-21 reciting that the "dried substrate" comprises a certain weight percentage of fluorine, that this is based on the total weight of the dried treated substrate. That is to say, that for a given portion of dried substrate having a mass of 100 grams and 0.5 weight percent fluorine, the substrate contains 0.5 grams fluorine.

Regarding sub-paragraph B, claim 5 recites, "the antistatic agent". It was stated in the Office Action that claim 1, from which claim 5 depends, does not provide antecedent basis for "the antistatic agent". Applicants respectfully disagree inasmuch as claim 1 appears to provide antecedent basis for the antistatic agent.

Regarding sub-paragraph C, claims 6, 7 and 34 recite a certain percentage or less that the hydrostatic head value is decreased. In the Office Action this language was alleged indefinite because "or less" includes zero and therefore contradicts the claim because "it is inclusive of no treatment at all". By way of explanation, Applicants point out that it is not the treatment itself which is recited by these claims to be a certain percentage "or less". If it were, this would indeed be contradictory. However, these claims instead recite that it is the liquid barrier property of the fabric (as measured by the hydrostatic head test) which is at issue, not the amount of treatment applied. Please see, for example, the specification at page 2, lines 6-8, where it is stated that it is desired to have a treatment method that does not negatively affect the material's barrier property (or minimizes negative affects on the barrier property).

Claims rejections, 35 U.S.C. §103(a) over Baldwin in view of Coates

By way of sections 12-14 of the Office Action mailed May 18, 2006, claims 1-4, 6-8 and 11-27 were rejected under 35 U.S.C. §103(a) as allegedly being obvious and thus unpatentable over U.S. Pat. No. 4,411,928 to Baldwin (hereinafter "Baldwin") in view of U.S. Pat. No. 4,082,887 to Coates (hereinafter "Coates"). This rejection is respectfully **traversed** to the extent applicable to the currently presented claims.

The invention as presently claimed in claim 1 is directed to a method of treating a substrate to improve the alcohol repellency of the substrate, the method including contacting a substrate with a treatment solution that has an ionic fluoropolymer and a monovalent salt, wherein the treatment solution contains less than about 0.05 weight percent by weight of an antistatic agent.

As stated in the Office Action, Baldwin teaches an alcohol repellent finish by treatment with a solution including fluoropolymer and a monovalent salt. According to the teaching of Baldwin, the monovalent salt is added for its antistatic properties. The Office Action then equated the monovalent salt with the antistatic agent in Applicants' claims. It

was noted in the Office Action that Baldwin only teaches use of 0.2 to 0.5 percent monovalent salt, which is at a minimum four times to ten times the maximum amount of antistatic agent in Applicants' claim 1, and is at a minimum forty times to one hundred times the minimum amount of antistatic agent in Applicants' claim 2. Nevertheless, the Office Action stated the position that the monovalent salt is a result effective variable and would therefore be within the skill of one skilled in the art to modify Baldwin to optimize.

However, Applicants respectfully submit that whether or not the monovalent salt in Baldwin is a result effective variable amenable to optimization misses the point. Applicants' claims already contain, explicitly, a monovalent salt such as is stated in Baldwin, and an antistatic agent (antistatic agents such as organic phosphate esters and mono- and di- substituted potassium isobutyl phosphate are described in the application specification, for example, at page 14 13-16 and page 17, lines 15-20). Applicants respectfully submit that it is incorrect to equate the monovalent salt of Baldwin with the antistatic agent and that, rather, the monovalent salt of Baldwin is properly equated with the monovalent salt recited in Applicants' claims.

Coates also teaches a process for applying alcohol repellent finishes, and specifically, teaches use of anionic fluoropolymer. It was stated in the Office Action that the teaching of Coates would be used by one skilled in the art to modify Baldwin, since Baldwin does not explicitly state ionic fluoropolymer. The motivation stated for this combination was "the desire and expectation of successfully imparting alcohol repellency to the substrate". Applicants submit that this is not a proper statement of motivation.

First, please note that as recognized in the Office Action, both Baldwin and Coates state substrate alcohol repellency, and that in particular, there is no recognition that the alcohol repellency of Baldwin is deficient in its own merit or in any way deficient to the alcohol repellency of Coates. As described in the disclosure of Baldwin, his fabric "is highly repellent to water, saline solution, body fluids and solvents, including isopropanol..." (please see Baldwin at column 1, lines 19-21). In addition, note that although Coates states at column 8 lines 46-47 that the alcohol performance is "good", no actual experimental or quantitative characterization appears to be provided for one skilled in the art. However, Baldwin does state quantitative values for the alcohol repellency of his by stating that they typically retain 80 percent and 90 percent isopropanol solutions.

Therefore, the stated motivation that one skilled in the art would modify Baldwin with the teachings of Coates due to the "desire and expectation of successfully imparting alcohol repellency" appears to be unfounded.

Therefore, for the reasons stated above, Applicants respectfully submit that the obviousness rejection under 35 U.S.C. §103(a) over Baldwin in view of Coates should be withdrawn.

Applicants also respectfully submit that for at least the reasons indicated above relating to corresponding independent claim, the pending dependent claims involved in this 35 U.S.C. §103(a) rejection over Baldwin in view of Coates patentably define over the references cited. However, Applicants also note that the patentability of the dependent claims does not hinge on the patentability of independent claims. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims. As a particular example, claims 3 and 4 each recite a second treatment or solution. The Office Action asserted that it is well-known in the art to apply multiple layers of a coating to build up a layer of desired thickness. It appears from this statement that the Office is relying on art not in evidence, and in particular submit that while certain types of treatments (such as paints) may be applied to a surface in multiple coats to build up thickness, Applicants are not aware of a desire to build up any particular thickness for the repellency treatments at issue in the instant application. Furthermore, the Office Action stated with respect to claims 3 and 4 that, "Since static electricity usually travels across the surface, addition of the antistatic agent to a later-applied layer of the composition would be desirable in order to conserve materials". Applicants respectfully submit that it further appears from this statement that the Office is relying on art not in evidence, and respectfully request that such art be made known to the Applicants.

Claims rejection, 35 U.S.C. §103(a) over Baldwin in view of Coates and further in view of Gilbert or in view of Weipert

By way of section 15 of the Office Action mailed May 18, 2006, claim 5 was rejected under 35 U.S.C. §103(a) as allegedly being obvious and thus unpatentable over Baldwin in view of Coates and further in view of U.S. Pat. No. 4,000,233 to Gilbert ("Gilbert") or in

view of U.S. Pat. No. 4,169,062 to Weipert ("Weipert"). This rejection is respectfully **traversed**. In the Office Action, Gilbert or Weipert was combined with the primary references (Baldwin in view of Coates) to provide for the missing organic phosphate ester antistatic agent.

However, as described above, Applicants respectfully submit that the main reference combination, Baldwin in view of Coates, is defective. Therefore, because claim 5 depends ultimately from independent claim 1 and includes all the elements of independent claim 1, Applicants submit that these additional combinations also fail to provide a prima facie obviousness rejection of Applicants' claim 5, and therefore respectfully submit that this rejection of claim 5 under 35 U.S.C. §103(a) should be withdrawn.

Claims rejections, 35 U.S.C. §103(a) over Baldwin in view of Coates and further in view of Potts

By way of section 16 of the Office Action mailed May 18, 2006, claims 9 and 10 were rejected under 35 U.S.C. §103(a) as allegedly being obvious and thus unpatentable over Baldwin in view of Coates and further in view of U.S. Pat. No. 5,145,727 to Potts ("Potts"). This rejection is respectfully **traversed**. In the Office Action, the Potts reference was provided for its teachings of laminate fabrics such as the SMS material taught therein, which were not taught in Baldwin or Coates.

However, as described above, Applicants respectfully submit that the main reference combination, Baldwin in view of Coates, is defective. Therefore, because claims 9 and 10 depend ultimately from independent claim 1 and include all the elements of independent claim 1, Applicants submit that this additional combination also fails to provide a prima facie obviousness rejection of Applicants' claims 9 and 10, and therefore respectfully submit that this rejection of claims 9 and 10 under 35 U.S.C. §103(a) should be withdrawn.

Claims rejections, 35 U.S.C. §103(a) over Baldwin in view of Coates and further in view of Gilbert or Weipert, and further in view of Potts

By way of section 17 of the Office Action mailed May 18, 2006, independent claim 33 and its dependent claim 34 were rejected under 35 U.S.C. §103(a) as allegedly being obvious and thus unpatentable over Baldwin in view of Coates, and further in view of Gilbert or Weipert, and still further in view of Potts. This rejection is respectfully **traversed**.

The invention as claimed in claim 33 provides a method of improving the alcohol repellency of a nonwoven laminate by applying a topical treatment to a nonwoven substrate, while minimizing any negative effect of the topical treatment on the water repellency of the nonwoven substrate, the method including providing a nonwoven laminate including at least one spunbond layer and at least one meltblown layer; contacting the nonwoven substrate with an aqueous topical treatment solution that does not include an organic phosphate ester, wherein the treatment solution includes water, less than about 0.1 weight percent of a monovalent salt or a mixture of monovalent salts and from about 0.1 to about 1 weight percent of an ionic fluoropolymer or a mixture of ionic fluoropolymers, wherein the monovalent salts are selected from the group consisting of sodium chloride, sodium nitrate, sodium carbonate, lithium chloride, lithium nitrate, lithium carbonate, potassium chloride, potassium nitrate, and potassium carbonate, the ionic fluoropolymers are selected from the group consisting of cationic and anionic fluoroalkyl acrylate homopolymers, fluoroalkyl acrylate copolymers, fluorinated siloxanes, fluorinated silicones, fluorinated urethanes, and mixtures thereof; and then contacting a surface of the topically treated nonwoven substrate with an antistatic agent selected from the group consisting of organic phosphate esters.

In the Office Action, it was merely alleged that all the features of this claim were either shown by the teachings of the references as described earlier in the Office Action, or were inherent or obvious for the reasons previously set forth with respect to other claims. Applicants respectfully disagree. First, as stated with respect to claim 1 and as applied to claim 33, Applicants submit that the initial combination of Baldwin and Coates has not been shown to be a proper combination. In addition, as stated above with respect to claims 3 and 4, it appears at least from the statements "well-known in the art to apply multiple layers of a coating to build up a layer of desired thickness" and "Since static electricity usually travels across the surface, addition of the antistatic agent to a later-applied layer of the composition would be desirable in order to conserve materials", that the Office may be relying on art not in evidence, and respectfully request that such art be made known to the Applicants. Furthermore, Applicants submit that there do not appear to be any teachings in the combined references of, at least, as in the method of claim 33 wherein the nonwoven laminate is contacted with an aqueous topical treatment that

includes water, less than about 0.1 weight percent of a monovalent salt or a mixture of monovalent salts and from about 0.1 to about 1 weight percent of an ionic fluoropolymer or a mixture of ionic fluoropolymers, that does not include an organic phosphate ester, and then, following the above, contacting a surface of the topically treated nonwoven substrate with an antistatic agent selected from the group consisting of organic phosphate esters.

Therefore, for at least the reasons stated above, Applicants respectfully submit that the obviousness rejection under 35 U.S.C. §103(a) over Baldwin in view of Coates, and further in view of Gilbert or Weipert, and still further in view of Potts should be withdrawn.

For at least the reasons stated above, it is respectfully submitted that all of the currently presented claims are in form for allowance.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at 770-587-8908. Should any issues remain after consideration of the remarks and explanations made herein, Examiner Fletcher is invited and encouraged to telephone the undersigned at his convenience.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION

I, Robert A. Ambrose, hereby certify that on November 20, 2006, this document is being transmitted to the United States Patent and Trademark Office, EFS-Web system.

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